What is claimed is:

- 1. A method a transmitting a radio signal, the method comprising implementing a protocol stack having at least a physical layer and a medium access control layer including a plurality of transport channels which are multiplexed to produce a physical layer signal, each transport channel being processed selectively in a first respectively selected manner or a second respectively selected manner in dependence on the modulation method employed in said physical layer.
- 2. A method according to claim 1, wherein a code identifying said selected manners is included in said physical layer signal.
- 3. A method according to claim 2, wherein said physical layer signal comprises a TDMA signal and said code is included in each burst of said signal in a predetermined location.
- 4. A radio transmitter comprising radio transmitting circuitry and processing means, the processing means being configured to implement a protocol stack having at least a physical layer and a medium access control layer including a plurality of transport channels which are multiplexed to produce a physical layer signal, each transport channel being processed selectively in a first respectively selected manner or a second respectively selected manner in dependence on the modulation method employed in said physical layer.
- 5. A radio transmitter according to claim 4, wherein a code identifying said selected manners is included in said physical layer signal.
- 6. A radio transmitter according to claim 5, wherein said physical layer signal comprises a TDMA signal and said code is included in each burst of said signal in a predetermined location.